What is Claimed is:

1. A trip unit comprising:

a housing;

a rotary plunger pivotally mounted with respect to said housing, said rotary plunger having a first position and a second position, a portion of said rotary plunger being pivoted outside of said housing in said second position;

means for latching said rotary plunger in said first position and for releasing said rotary plunger from said first position; and

means for biasing said rotary plunger to said second position.

2. The trip unit of Claim 1 wherein said means for latching said rotary plunger in said first position and for releasing said rotary plunger from said first position includes a trip bar pivotally mounted within said housing.

3. The trip unit of Claim 2 wherein said means for latching said rotary plunger in said first position and for releasing said rotary plunger from said first position further includes means for biasing said trip bar to pivot in a first rotational direction and means for engaging said trip bar to pivot in an opposite second rotational direction.

4. The trip unit of Claim 2 wherein said rotary plunger includes a latch surface within said housing; and wherein said trip bar includes a tab engaging the latch surface of said rotary plunger, in order to latch said rotary plunger in said first position.

5. The trip unit of Claim 4 wherein the tab of said trip bar is a first tab; wherein said trip bar includes a second tab; wherein said means for latching said rotary plunger in said first position and for releasing said rotary plunger from said first position further includes a rotary trip lever pivotally mounted within said housing, said rotary trip lever engaging the second tab of said trip bar, in order to rotate said trip bar and disengage the first tab from the latch surface of said rotary plunger, in order to release said rotary plunger from said first position.

6. The trip unit of Claim 5 wherein said means for latching said rotary plunger in said first position and for releasing said rotary plunger from said first position further includes a trip actuator having a linear plunger engaging said rotary

trip lever, in order to rotate said rotary trip lever to engage the second tab of said trip bar.

7. The trip unit of Claim 1 wherein said rotary plunger includes a first pivot engaging said housing; wherein said means for biasing said rotary plunger to said second position includes a second pivot engaging said rotary plunger at a position offset from said first pivot, a member engaging said housing at a position offset from said first pivot, and at least one spring disposed between said second pivot and said member.

8. The trip unit of Claim 7 wherein each of said second pivot and said member includes a first end and a second end; and wherein said at least one spring is a first spring engaging the first ends of said second pivot and said member, and a second spring engaging the second ends of said second pivot and said member.

9. The trip unit of Claim 1 wherein the portion of said rotary plunger being pivoted outside of said housing in said second position includes a surface adapted to engage a latch of a circuit breaker frame.

10. The trip unit of Claim 1 wherein the portion of said rotary plunger being pivoted outside of said housing in said second position is generally pie-slice shaped and includes a first sub-portion having a first radius and a second sub-portion having a smaller second radius, said first sub-portion being adapted to engage a latch of a circuit breaker frame.

11. A trip unit comprising:

a housing;

a rotary plunger pivotally mounted with respect to said housing, said rotary plunger having a first position and a second position, a portion of said rotary plunger being pivoted outside of said housing in said second position;

a trip bar pivotally mounted with respect to said housing, said trip bar including a first tab latching said rotary plunger in said first position and releasing said rotary plunger from said first position, said trip bar also including a second tab;

a trip actuator including a member engaging the second tab of said trip bar, in order to pivot said trip bar and release said rotary plunger from said first position;

means for biasing said trip bar, in order that said first tab latches said rotary plunger in said first position; and

means for biasing said rotary plunger to said second position.

12. The trip unit of Claim 11 wherein said trip actuator further includes a solenoid having a linear plunger; wherein the member of said trip actuator is a trip lever pivotally mounted with respect to said housing, said linear plunger engaging and pivoting said trip lever, in order to engage the second tab of said trip bar, pivot said trip bar and release said rotary plunger from said first position.

13. The trip unit of Claim 11 wherein said trip bar further includes a third tab; and wherein said means for biasing said trip bar is a spring engaging said housing and the third tab of said trip bar, in order that said first tab latches said rotary plunger in said first position.

14. The trip unit of Claim 11 wherein said rotary plunger includes a first pivot engaging said housing; and wherein said means for biasing said rotary plunger to said second position includes a member engaging said housing at a position offset from said first pivot, a second pivot engaging said rotary plunger at a position offset from said first pivot, a first spring and a second spring, said member and said second pivot including a first end and a second end, said first spring engaging the first ends of said second pivot and said member, and said second spring engaging the second ends of said second pivot and said member.

15. A circuit breaker comprising:

a circuit breaker frame comprising:

a housing,

a line terminal,

a load end terminal,

separable contacts electrically connected between said line terminal and said load end terminal,

an operating mechanism moving said separable contacts between a closed position and an open position, and

a latch mechanism latching said operating mechanism to provide the closed position of said separable contacts and releasing said operating mechanism to provide the open position of said separable contacts; and

a trip unit comprising:

a housing,

a line end terminal electrically connected to the load end terminal of said circuit breaker frame,

a rotary plunger pivotally mounted to the housing of said trip unit, said rotary plunger having a first position and a second position, a portion of said rotary plunger being pivoted outside of the housing of said trip unit in said second position,

means for latching said rotary plunger in said first position and for releasing said rotary plunger from said first position, and

means for biasing said rotary plunger to said second position.

16. The circuit breaker of Claim 15 wherein said rotary plunger further has a reset position, which resets said means for latching said rotary plunger in said first position.

17. The circuit breaker of Claim 16 said portion of said rotary plunger is pivoted inside of the housing of said trip unit in said reset position.

18. The circuit breaker of Claim 15 wherein the housing of said trip unit includes a surface adjacent to said circuit breaker frame; wherein said trip unit is adapted for disengagement from said circuit breaker frame; and wherein said means for latching said rotary plunger in said first position latches said rotary plunger about flush with the surface of the housing of said trip unit.

19. The circuit breaker of Claim 18 wherein the housing of said circuit breaker frame includes a surface; wherein said rotary plunger includes a surface, which is pivoted outside of the housing of said trip unit in said second position; and wherein when said trip unit is disengaged from said circuit breaker frame, the surface of said circuit breaker frame cams the surface of said rotary plunger to pivot said rotary plunger to be about flush with the surface of the housing of said trip unit.

20. The circuit breaker of Claim 15 wherein the housing of said trip unit includes an opening for said rotary plunger; wherein the opening of the housing of said trip unit includes debris after a trip of said circuit breaker frame; and wherein

when the portion of said rotary plunger is pivoted outside of the housing of said trip unit, said rotary plunger sweeps said debris out of the opening of the housing of said trip unit.

21. The circuit breaker of Claim 15 wherein the portion of said rotary plunger being pivoted outside of the housing of said trip unit in said second position is generally pie-slice shaped and includes a first sub-portion having a first radius and a second sub-portion having a smaller second radius, said first sub-portion being adapted to engage said latch mechanism of said circuit breaker frame.